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Appendix B

Chart Identifying Support for Each Claim in the Specification

2. **(Three Times Amended)** A method of generating	Page 40, lines 17 - 25	The signals of the present invention are the modalities whereby stations that originate programming transmissions control the handling, generating, and displaying of programming at subscriber stations. (The term, "SPAM," is used, hereinafter, to refer to signal processing apparatus and methods of the present invention.) SPAM signals control and coordinate a wide variety of subscriber stations.
a television	Page 478, lines 23 - 26	Then said studio ... commences transmitting the conventional television video and audio information of program unit Q.
display	Page 503, line 34 - page 504, line 1	... said program originating studio commences transmitting the video image of the so-called "talking head" of said person standing in front of a background image ...
	Page 506, lines 17 - 21	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "456-1414" with its received conventional video information. And automatically 456-1414 is displayed in the lower middle portion of the picture screen of monitor, 202M.
at a receiver station,	Page 470, lines 9 - 12	At the station of Fig. 7 and 7F (which station is a subscriber station of the intermediate station of Fig. 6), in the fashions described above, apparatus is caused to receive the particular transmission of said program ...
said receiver station	Page 470, lines 19 -	... and to display the television

comprising a television monitor for displaying television programming	21	information of said transmission (that is, information of said audio and video) at monitor, 202M.
and a processor for generating	Page 485, lines 14 - 18	Under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, of Figs. 7 and 7F generates image information of a first video overlay and generates selected information of subsequent overlays in the following fashion.
and communicating a video image to said television monitor, said method comprising the steps of:	Page 506, lines 17 - 21	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "456-1414" with its received conventional video information. And automatically 456-1414 is displayed in the lower middle portion of the picture screen of monitor, 202M.
	For example, page 26, lines 4 - 8	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image ...
receiving a television signal,	Page 470, lines 9 - 12	At the station of Fig. 7 and 7F (which station is a subscriber station of the intermediate station of Fig. 6), in the fashions described above, apparatus is caused to receive the particular transmission of said program ...
	Page 478, lines 23 - 26	Then said studio ceases transmitting "Exotic Meals of India" programming for a so-called "commercial break" and commences transmitting the conventional television video and audio information of program unit Q.
said television signal including digital data;	Page 481, lines 6 - 9	... causing said decoder, 203, to commence identifying and processing the

		individual SPAM messages of the SPAM information subsequently embedded in the transmission of the programming of Q.
	Page 14, line 35 - page 15, line 2	Examples of signal words are a string of one or more digital data bits encoded together on a single line of video or sequentially in audio.
detecting said digital data and passing said detected digital data to said processor;	Page 484, lines 12 - 18	At the station of Figs. 7 and 7F, receiving the program- instruction-set message (#10) transmitted by the intermediate transmission station of Fig. 6 causes said message to be detected at decoder, 203, and causes decoder, 203, to load and execute at microcomputer, 205, the information segment of said message (which is the program instruction set of Q.1 and is the output file, PROGRAM.EXE, of said station).
generating and communicating said video image	Page 485, lines 15 - 18	... the microcomputer, 205, of Figs. 7 and 7F generates image information of a first video overlay and generates selected information of subsequent overlays in the following fashion.
	Page 486, lines 20 - 27	Automatically, microcomputer, 205, clears video RAM; causes the background color of video RAM to be a color such as black that is transparent when combined with transmitted video by the PC-MicroKey System; causes binary image information of "$1,071.32" to be placed at bit locations of video RAM that produce video image information in the upper left hand of a video screen when video RAM information is transmitted to said screen.
	Page 491, lines 10 - 16	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "$1,071.32" with its received conventional video information. And automatically $1,071.32 is displayed at the upper left hand corner of the picture screen of monitor, 202M, which is the

		corner to which the image of the person shown at said screen is pointing.
in response to a first portion of said detected and passed digital data;	Page 485, lines 14 - 15	Under control of the instructions of said program instruction set of Q.1, ...
inputting a clear-and-continue signal to said processor	Page 500, lines 10 - 15	... said 1st cease-outputting message (#10) causes decoder, 203, ... to input the aforementioned clear-and-continue instruction to the CPU of microcomputer, 205. In the preferred embodiment, said instruction is inputted to said CPU as an interrupt signal.
in response to a second portion of said detected and passed digital data;	Page 499, lines 30 - 32	At the station of Figs. 7 and 7F, decoder, 203, detects the information of said message, and receiving said 1st cease-outputting message (#10) causes ...
	Page 499, lines 23 - 24	Then said program originating studio embeds and transmits said 1st cease-outputting message (#10).
	Page 14, line 35 - page 15, line 2	Examples of signal words are a string of one or more digital data bits encoded together on a single line of video or sequentially in audio.
controlling said processor based on said clear-and-continue signal, said step of controlling comprising the steps of:	Page 500, lines 15 - 22	Receiving said clear-and-continue instruction ... causes microcomputer, 205, in a fashion well known in the art, to cease its current function, ... to execute a particular when-interrupted portion of said program instruction set of Q.1.
(a) clearing at least a portion of an output memory;	Page 501, lines 16 - 17	Automatically, under control of said instructions, microcomputer, 205, clears video RAM; ...
(b) jumping to a predetermined	Page 501, lines 5 - 16	... under control of the instructions of said when-interrupted portion, microcomputer,

instruction; and		205, determines that said clear-and-continue instruction is the first instance of a clear-and-continue instruction that microcomputer, 205, has received while under control of said program instruction set of Q.1. So determining causes microcomputer, 205, ... to jump to a particular first-clear-and-continue address of the instructions of said program instruction set of Q.1 and to commence executing first-clear-and-continue instructions at said address.
(c) generating video image information based on said predetermined instruction.	Page 485, lines 14 - 18	Under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, of Figs. 7 and 7F ... generates selected information of subsequent overlays in the following fashion.
	Page 501, lines 16 - 25	Automatically, under control of said instructions, microcomputer, 205, ... sets the background color of video RAM to a transparent overlay black; determines that the aforementioned 1st working memory of said microcomputer, 205, holds southwest-quadrant information; selects from said D:DATA_OF.ITS file information of the aforementioned southwest delivery route telephone number, "456-1414", and causes binary image information of said number to be placed at bit locations that produce video image information in the lower middle portion of a video screen.

3. (Amended) The method of claim 2, wherein said detected and passed digital data include a computer program, said method further comprising the steps of:	Page 484, lines 12 - 18	At the station of Figs. 7 and 7F, receiving the program- instruction-set message (#10) transmitted by the intermediate transmission station of Fig. 6 causes said message to be detected at decoder, 203, and causes decoder, 203, to load and execute at microcomputer, 205, the information segment of said message

storing said computer program at a memory operatively connected to said processor; and		(which is the program instruction set of Q.1 and is the output file, PROGRAM.EXE, of said station).
determining an address at said memory to which a jump is to be made.	Page 501, lines 5 – 16 (emphasis added)	Then, under control of the instructions of said when-interrupted portion, microcomputer, 205, determines that said clear-and-continue instruction is the *first* instance of a clear-and-continue instruction that microcomputer, 205, has received while under control of said program instruction set of Q.1. So determining causes microcomputer, 205, to place "0" at particular Flag-interrupt register memory of said CPU that is normally "1" then to jump to a particular *first-clear-and-continue address* of the instructions of said program instruction set of Q.1 and to commence executing first-clear-and-continue instructions at said address.

4. (**Amended**) The method of claim 2, wherein a processor interrupt signal causes said processor to respond to said clear-and-continue signal, said method further comprising the step of: inputting said clear-and-continue signal to interrupt said processor.	Page 500, lines 9 - 22	At the station of Figs. 7 and 7F, receiving said 1st cease-outputting message (#10) causes decoder, 203, after so executing "GRAPHICS OFF", to input the aforementioned clear-and-continue instruction to the CPU of microcomputer, 205. In the preferred embodiment, said instruction is inputted to said CPU as an interrupt signal. Receiving said clear-and-continue instruction as an interrupt signal causes microcomputer, 205, in a fashion well known in the art, to cease its current function, to store particular information at particular instruction-at-which-to- resume memory that identifies the location of the particular instruction at which to resume said function, and to execute a particular when-interrupted portion of said program instruction set of Q.1.

5. (Unchanged) The method of claim 2, wherein said clear-and-continue signal is inputted to said processor by a controller, said method further comprising the steps of:	Page 500, lines 9 - 13	At the station of Figs. 7 and 7F, receiving said 1st cease-outputting message (#10) causes decoder, 203, after so executing "GRAPHICS OFF", to input the aforementioned clear-and-continue instruction to the CPU of microcomputer, 205.
	Page 480, lines 14 - 17 See Fig. 7E.	In so doing, receiving said message causes matrix switch, 258, to interconnect the apparatus of said station in the fashion of Fig. 7E.
	Page 34, lines 21 - 28 Fig. 2A is referenced in Fig. 7E.	Fig. 2A shows a TV signal decoder that detects signal information embedded in an inputted television frequency, renders said information into digital signals that subscriber station apparatus can process, identifies the particular apparatus to which said signals are addressed, and outputs said signals to said apparatus. Decoder, 203, in Fig. 1 is one such TV signal decoder; decoder, 30, in Fig. 2 is another.
	Page 36, lines 32 - 33 See Fig. 2A.	Each decoder is controlled by a controller, 39, 44, or 47, that has buffer, microprocessor, ROM, and RAM capacities.
	Page 156, line 33 See Fig. 3A.	Fig. 3A shows one such preferred controller, 39.
inputting data detected in said television signal to said controller; and	As one example, page 35, lines 24 – 27. See Fig. 2A.	The digital detector, 37, detects signal information embedded in said audio information and inputs detected signal information to controller, 39.
	Page 14, line 35 - page 15, line 2	Examples of signal words are a string of one or more digital data bits encoded together on a single line of video or

		sequentially in audio.
	Page 484, lines 12 - 15	At the station of Figs. 7 and 7F, receiving the program- instruction-set message (#10) transmitted by the intermediate transmission station of Fig. 6 causes said message to be detected at decoder, 203, and causes decoder, 203, to ...
	Page 499, lines 27 - 33	Receiving said 1st cease-outputting message (#10) causes each subscriber station to cease combining and to display only the transmitted video information at its monitor, 202M. At the station of Figs. 7 and 7F, decoder, 203, detects the information of said message, and receiving said 1st cease-outputting message (#10) causes decoder, 203, to ...
communicating signals from said controller to said processor based on said inputted data.	Page 484, lines 12 - 18	At the station of Figs. 7 and 7F, receiving the program- instruction-set message (#10) transmitted by the intermediate transmission station of Fig. 6 causes said message to be detected at decoder, 203, and causes decoder, 203, to load and execute at microcomputer, 205, the information segment of said message (which is the program instruction set of Q.1 and is the output file, PROGRAM.EXE, of said station).
	Page 485, lines 14 - 16	Under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, of Figs. 7 and 7F generates image information of a first video overlay ...
	Page 499, line 23 - page 500, line 22	Then said program originating studio embeds and transmits said 1st cease-outputting message (#10). Said message is identical to the aforementioned third message of the "Wall Street Week" example. Receiving said 1st cease-outputting message (#10) causes each subscriber station to cease combining and to display

		only the transmitted video information at its monitor, 202M. At the station of Figs. 7 and 7F, decoder, 203, detects the information of said message, and receiving said 1st cease-outputting message (#10) causes decoder, 203, to execute "GRAPHICS OFF" at the PC-MicroKey System of microcomputer, 205. In so doing, decoder, 203, causes said PC-MicroKey to cease combining its specific image information with the conventional video information transmitted by said studio, to commence transmitting only the transmitted video information to monitor, 202M. Receiving said message causes each subscriber station then temporarily to stop generating and outputting said print output information, to prepare to combine a second specific video overlay image, then to resume generating and outputting said print output information. At the station of Figs. 7 and 7F, receiving said 1st cease-outputting message (#10) causes decoder, 203, after so executing "GRAPHICS OFF", to input the aforementioned clear-and-continue instruction to the CPU of microcomputer, 205. In the preferred embodiment, said instruction is inputted to said CPU as an interrupt signal. Receiving said clear-and-continue instruction as an interrupt signal causes microcomputer, 205, in a fashion well known in the art, to cease its current function, to store particular information at particular instruction-at-which-to- resume memory that identifies the location of the particular instruction at which to resume said function, and to execute a particular when-interrupted portion of said program instruction set of Q.1.

6. (Unchanged) A method of generating	Page 40, lines 17 - 25	The signals of the present invention are the modalities whereby stations that

		originate programming transmissions control the handling, generating, and displaying of programming at subscriber stations. (The term, "SPAM," is used, hereinafter, to refer to signal processing apparatus and methods of the present invention.) SPAM signals control and coordinate a wide variety of subscriber stations.
a television	Page 478, lines 23 - 26	Then said studio ... commences transmitting the conventional television video and audio information of program unit Q.
display	Page 490, lines 21 - 23	Said studio transmits television picture information of the right hand and arm of said person pointing moving to point at the upper left hand corner of the television screen.
	Page 491, lines 10 - 16	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "$1,071.32" with its received conventional video information. And automatically $1,071.32 is displayed at the upper left hand corner of the picture screen of monitor, 202M, which is the corner to which the image of the person shown at said screen is pointing.
at at least one of	Page 470, line 9	At the station of Fig. 7 and 7F ...
a plurality of receiver stations,	Page 470, lines 9 - 12	At the station of Fig. 7 and 7F (which station is a subscriber station of the intermediate station of Fig. 6), in the fashions described above, apparatus is caused to receive the particular transmission of said program ...
	Page 470, lines 27 - 31	(Simultaneously and in the same fashion, apparatus of the station of said second subscriber [which station is a subscriber station of the intermediate station of Fig. 6] receives, ... the

		information of said transmission.
each of said plurality of receiver stations having a television monitor for displaying television programming	Page 470, lines 19 - 21	... and to display the television information of said transmission (that is, information of said audio and video) at monitor, 202M.
	Page 470, lines 27 - 31	(Simultaneously and in the same fashion, apparatus of the station of said second subscriber ... displays at a monitor, 202M, the information of said transmission.
and a processor for generating	Page 485, lines 14 - 18	Under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, of Figs. 7 and 7F generates image information of a first video overlay and generates selected information of subsequent overlays in the following fashion.
	Page 486, line 27 - page 487, line 8	(Simultaneously, under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, at the station of said second subscriber ... causes binary image information of "$1,080.64" to be placed at particular upper left hand video screen bit locations of video RAM.
and communicating a video image to said television monitor, comprising the steps of:	Page 491, lines 10 - 24	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "$1,071.32" with its received conventional video information. And automatically $1,071.32 is displayed at the upper left hand corner of the picture screen of monitor, 202M, which is the corner to which the image of the person shown at said screen is pointing. (Simultaneously and in the same fashion, apparatus at the station of said second subscriber causes the specific video RAM image information of said station, which is "$1,080.64", to be displayed at the upper left hand corner of the picture

		screen of the monitor, 202M, of said station and said subscriber can see the image said person pointing at $1,080.64.
(a) receiving	Page 343, lines 26 - 32	Automatically, at the station of Fig. 6, the computer, 73, instructs ... receiver, 53, ... to receive the transmission of the frequency of the transponder 23 of said satellite.
	Page 344, lines 24 – 31 (emphasis added)	... said remote distribution station commences transmitting programming by satellite up-link means, well known in the art. Said programming consists of a sequence of the program units of 26 spot commercials, each of thirty seconds duration. In succession, said station transmits units A, B, C, D, ... P, ***Q***, R, ... Embedded in each of said program units are SPAM messages ...
	Please note page 347, lines 4 - 5	... causing said recorder, 76, to record the programming of program unit Q ...
	Page 372, lines 22 - 28	... SPAM messages that are embedded in the prerecorded programming of Q. (Hereinafter, said messages are called ... the "1st cease- outputting message (#9)", ...
a clear-and-continue	Page 500, lines 10 - 15	... said 1st cease-outputting message (#10) causes decoder, 203, ... to input the aforementioned clear-and-continue instruction to the CPU of microcomputer, 205. In the preferred embodiment, said instruction is inputted to said CPU as an interrupt signal.
signal;	Page 40, lines 17 - 20	The signals of the present invention are the modalities whereby stations that originate programming transmissions control the handling, generating, and displaying of programming at subscriber stations.
(b) receiving a	Page 367, line 2	Receiving said message ...

control signal which operates		
	Page 59, lines 29 - 31	A SPAM message is the modality whereby the original transmission station that originates said message controls specific addressed apparatus at subscriber stations.
at a transmitter station	Page 354, lines 7 - 9	The station of Fig. 6 has capacity to automatically process and transmit television-based combined medium programming ...
to communicate said clear-and-continue signal to a transmitter; and	Page 367, lines 2 - 9	Receiving said message and mark causes computer, 73, to cause recorder, 76, to commence playing and to cause matrix switch, 75, to configure its switches ... to commence transferring the output of recorder, 76, to modulator, 83, ...
	Page 372, lines 20 - 28	Subsequently, ... recorder, 76, plays ... the programming of Q, ... SPAM messages that are embedded in the prerecorded programming of Q. ... the "1st cease- outputting message (#9)", ...
(c) transmitting said clear-and-continue signal,	Page 367, lines 8 - 9	... which causes the transmission of unit Q to field distribution system, 93.
	Page 372, lines 20 - 28	... transmits the programming of Q, via modulator, 83, to field distribution system, 93, recorder, 76, transmits eight SPAM messages that are embedded in the prerecorded programming of Q. (Hereinafter, said messages are called ... "1st cease- outputting message (#9)", ...
said clear-and-continue signal effective at said at least one of a plurality of receiver stations to control said processor to	Page 500, lines 15 - 22	Receiving said clear-and-continue instruction as an interrupt signal causes microcomputer, 205, in a fashion well known in the art, to cease its current function, ... and to execute a particular when-interrupted portion of said program instruction set of Q.1. ...

clear at least a portion of an output memory,	Page 501, lines 16 - 17	Automatically, under control of said instructions, microcomputer, 205, clears video RAM; ...
jump to a predetermined instruction,	Page 501, lines 5 - 16	... under control of the instructions of said when-interrupted portion, microcomputer, 205, determines that said clear-and-continue instruction is the first instance of a clear-and-continue instruction that microcomputer, 205, has received while under control of said program instruction set of Q.1. So determining causes microcomputer, 205, ... to jump to a particular first-clear-and-continue address of the instructions of said program instruction set of Q.1 and to commence executing first-clear-and-continue instructions at said address.
and generate video image information based on said predetermined instruction.	Page 485, lines 14 - 18	Under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, of Figs. 7 and 7F generates image information of a first video overlay and generates selected information of subsequent overlays in the following fashion.
	Page 501, lines 16 - 25	Automatically, under control of said instructions, microcomputer, 205, ... sets the background color of video RAM to a transparent overlay black; determines that the aforementioned 1st working memory of said microcomputer, 205, holds southwest-quadrant information; selects from said D:DATA_OF.ITS file information of the aforementioned southwest delivery route telephone number, "456-1414", and causes binary image information of said number to be placed at bit locations that produce video image information in the lower middle portion of a video screen.

7. (Unchanged) A method of generating	Page 40, lines 17 - 25	The signals of the present invention are the modalities whereby stations that originate programming transmissions control the handling, generating, and displaying of programming at subscriber stations. (The term, "SPAM," is used, hereinafter, to refer to signal processing apparatus and methods of the present invention.) SPAM signals control and coordinate a wide variety of subscriber stations.
a television	Page 478, lines 23 - 26	Then said studio ... commences transmitting the conventional television video and audio information of program unit Q.
display	Page 490, lines 21 - 23	Said studio transmits television picture information of the right hand and arm of said person pointing moving to point at the upper left hand corner of the television screen.
	Page 491, lines 10 - 16	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "$1,071.32" with its received conventional video information. And automatically $1,071.32 is displayed at the upper left hand corner of the picture screen of monitor, 202M, which is the corner to which the image of the person shown at said screen is pointing.
at at least one of	Page 470, line 9	At the station of Fig. 7 and 7F ...
a plurality of receiver stations,	Page 470, lines 9 - 12	At the station of Fig. 7 and 7F (which station is a subscriber station of the intermediate station of Fig. 6), in the fashions described above, apparatus is caused to receive the particular transmission of said program ...
	Page 470, lines 27 - 31	(Simultaneously and in the same fashion, apparatus of the station of said second subscriber [which station is a

		subscriber station of the intermediate station of Fig. 6] receives, ... the information of said transmission.
each of said plurality of receiver stations having a television monitor for displaying television programming	Page 470, lines 19 - 21	... and to display the television information of said transmission (that is, information of said audio and video) at monitor, 202M.
	Page 470, lines 27 - 31	(Simultaneously and in the same fashion, apparatus of the station of said second subscriber ... displays at a monitor, 202M, the information of said transmission.
and a processor for generating	Page 485, lines 14 - 18	Under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, of Figs. 7 and 7F generates image information of a first video overlay and generates selected information of subsequent overlays in the following fashion.
	Page 486, line 27 - page 487, line 8	(Simultaneously, under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, at the station of said second subscriber ... causes binary image information of "$1,080.64" to be placed at particular upper left hand video screen bit locations of video RAM.
and communicating a video image to said television monitor, comprising the steps of:	Page 491, lines 10 - 24	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "$1,071.32" with its received conventional video information. And automatically $1,071.32 is displayed at the upper left hand corner of the picture screen of monitor, 202M, which is the corner to which the image of the person shown at said screen is pointing. (Simultaneously and in the same fashion, apparatus at the station of said second subscriber causes the specific video RAM image information of said station, which

		is "$1,080.64", to be displayed at the upper left hand corner of the picture screen of the monitor, 202M, of said station and said subscriber can see the image said person pointing at $1,080.64.
(a) receiving	Page 343, lines 26 - 32	Automatically, at the station of Fig. 6, the computer, 73, instructs ... receiver, 53, ... to receive the transmission of the frequency of the transponder 23 of said satellite.
	Page 344, lines 24 – 31 (emphasis added)	... said remote distribution station commences transmitting programming by satellite up-link means, well known in the art. Said programming consists of a sequence of the program units of 26 spot commercials, each of thirty seconds duration. In succession, said station transmits units A, B, C, ... P, *Q*, R, ... Embedded in each of said program units are SPAM messages ...
and storing	Page 347, lines 4 - 5	... causing said recorder, 76, to record the programming of program unit Q ...
	Page 372, lines 22 - 28	... SPAM messages that are embedded in the prerecorded programming of Q. (Hereinafter, said messages are called ... the "1st cease- outputting message (#9)", ...
a clear-and-continue	Page 500, lines 10 - 15	... receiving said 1st cease-outputting message (#10) causes decoder, 203, ... to input the aforementioned clear-and-continue instruction to the CPU of microcomputer, 205. In the preferred embodiment, said instruction is inputted to said CPU as an interrupt signal.
signal; and	Page 40, lines 17 - 20	The signals of the present invention are the modalities whereby stations that originate programming transmissions control the handling, generating, and displaying of programming at subscriber stations.

(b) causing said clear-and-continue signal to be communicated to a transmitter	Page 367, lines 2 - 9	... causes computer, 73, to cause recorder, 76, to commence playing and to cause matrix switch, 75, to configure its switches so as ... to commence transferring the output of recorder, 76, to modulator, 83, ...
	Page 372, lines 20 - 28	Subsequently, ... recorder, 76, plays ... the programming of Q, ... SPAM messages that are embedded in the prerecorded programming of Q. ... the "1st cease- outputting message (#9)", ...
at a specific time,	Page 366, lines 19 - 20	Subsequently, at the scheduled time of the playing of Q, ...
thereby to transmit said clear-and-continue signal,	Page 367, lines 8 - 9	... which causes the transmission of unit Q to field distribution system, 93.
	Page 372, lines 20 - 28	... transmits the programming of Q, via modulator, 83, to field distribution system, 93, recorder, 76, transmits eight SPAM messages that are embedded in the prerecorded programming of Q. (Hereinafter, said messages are called ... the "1st cease- outputting message (#9)", ...
said clear-and-continue signal effective at said at least one of a plurality of receiver stations to control said processor to	Page 500, lines 15 - 22	Receiving said clear-and-continue instruction as an interrupt signal causes microcomputer, 205, in a fashion well known in the art, to cease its current function, ... and to execute a particular when-interrupted portion of said program instruction set of Q.1.
clear at least a portion of an output memory,	Page 501, lines 16 - 17	Automatically, under control of said instructions, microcomputer, 205, clears video RAM; ...
jump to a predetermined instruction,	Page 501, lines 5 - 16	... under control of the instructions of said when-interrupted portion, microcomputer, 205, determines that said clear-and-continue instruction is the first instance of a clear-and-continue instruction that

		microcomputer, 205, has received while under control of said program instruction set of Q.1. So determining causes microcomputer, 205, ... to jump to a particular first-clear-and-continue address of the instructions of said program instruction set of Q.1 and to commence executing first-clear-and-continue instructions at said address.
and generate video image information based on said predetermined instruction.	Page 485, lines 14 - 18	Under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, of Figs. 7 and 7F generates image information of a first video overlay and generates selected information of subsequent overlays in the following fashion.
	Page 501, lines 16 - 25	Automatically, under control of said instructions, microcomputer, 205, ... sets the background color of video RAM to a transparent overlay black; determines that the aforementioned 1st working memory of said microcomputer, 205, holds southwest-quadrant information; selects from said D:DATA_OF.ITS file information of the aforementioned southwest delivery route telephone number, "456-1414", and causes binary image information of said number to be placed at bit locations that produce video image information in the lower middle portion of a video screen.

8. **(Twice Amended)** A method of generating	Page 40, lines 17 - 25	The signals of the present invention are the modalities whereby stations that originate programming transmissions control the handling, generating, and displaying of programming at subscriber stations. (The term, "SPAM," is used, hereinafter, to refer to signal processing apparatus and methods of the present invention.)

		SPAM signals control and coordinate a wide variety of subscriber stations.
a television	Page 478, lines 23 - 26	Then said studio ... commences transmitting the conventional television video and audio information of program unit Q.
display	Page 490, lines 21 - 23	Said studio transmits television picture information of the right hand and arm of said person pointing moving to point at the upper left hand corner of the television screen.
	Page 491, lines 10 - 16	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "$1,071.32" with its received conventional video information. And automatically $1,071.32 is displayed at the upper left hand corner of the picture screen of monitor, 202M, which is the corner to which the image of the person shown at said screen is pointing.
in a receiver station,	Page 470, lines 9 - 12	At the station of Fig. 7 and 7F (which station is a subscriber station of the intermediate station of Fig. 6), in the fashions described above, apparatus is caused to receive the particular transmission of said program ...
	Please note also page 480, lines 14 - 17	In so doing, receiving said message causes matrix switch, 258, to interconnect the apparatus of said station in the fashion of Fig. 7E.
said receiver station including at least one processor for generating a	Page 485, lines 14 - 18	Under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, of Figs. 7 and 7F generates image information of a first video overlay and generates selected information of subsequent overlays in the following fashion.
television	Page 478, lines 23 - 26	Then said studio ... commences transmitting the conventional television

		video and audio information of program unit Q.
video image and a television monitor for displaying transmitted television programming and said television video image, said method comprising the steps of:	Page 491, lines 10 - 16	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "$1,071.32" with its received conventional video information. And automatically $1,071.32 is displayed at the upper left hand corner of the picture screen of monitor, 202M, which is the corner to which the image of the person shown at said screen is pointing.
	Page 490, lines 21 - 23	Said studio transmits television picture information of the right hand and arm of said person pointing moving to point at the upper left hand corner of the television screen.
receiving	Page 470, lines 9 - 13	At the station of Fig. 7 and 7F (which station is a subscriber station of the intermediate station of Fig. 6), in the fashions described above, apparatus is caused to receive the particular transmission of said program that is retransmitted by the intermediate station of Fig. 6; ...
a broadcast or cablecast transmission	Page 324, lines 11 - 21	The stations so automated may transmit any form of electronically transmitted programming, including television, radio, print, data, and combined medium programming and may range in scale of operation from wireless broadcast stations that transmit a single programming transmission to cable systems that cablecast many channels simultaneously. Fig. 6 illustrates Signal Processing Apparatus and Methods at an intermediate transmission station that is a cable television system "head end" and that cablecasts several channels of television programming.
including said	Page 469, line 35 -	The program originating studio of a

transmitted television programming		
	Page 478, lines 23 - 26	Then said studio ceases transmitting "Exotic Meals of India" programming for a so-called "commercial break" and commences transmitting the conventional television video and audio information of program unit Q.
and an information transmission, said information transmission further including at least one embedded signal	Page 481, lines 6 - 9	... causing said decoder, 203, to commence identifying and processing the individual SPAM messages of the SPAM information subsequently embedded in the transmission of the programming of Q.
	Page 476, line 34 - page 477, line 3	(An alternate method for inputting said second message to the microcomputers, 205, at stations where TV567# is entered at a local input, 225, is to embed said message in a particular second transmission that is different from the transmission of said "Exotic Meals of India" programming ...
	For example, page 463, lines 10 - 29	(To minimize the risk that program instruction sets may become separated from their associated television programming, said sets are normally embedded in their associated television transmissions. But it is not an absolute requirement of the preferred embodiment that all program instruction sets be so embedded. If the volume of program instruction set information that a given programming transmission must transmit exceeds the transmission capacity of said transmission [eg., if the audience includes viewers who do not have overlay capacity and would see "snow" were set information transmitted in portions of the transmission obscured by overlays], at the proper time transmission stations can transmit said set information outside the conventional transmission [a program

		originating studio may transmit said set information, for example, in a satellite side lobe of the transponder transmission transmitting the conventional transmission, and a cable head end intermediate transmission station transmits it in a separate television channel or in a transmission in a multiplexed FM frequency spectrum transmission].)
detecting said information transmission in said broadcast or cablecast transmission;	Page 484, lines 12 - 15	At the station of Figs. 7 and 7F, receiving the program- instruction-set message (#10) transmitted by the intermediate transmission station of Fig. 6 causes said message to be detected at decoder, 203, ...
passing said detected information transmission to said processor;	Page 484, lines 12 - 18	At the station of Figs. 7 and 7F, receiving the program- instruction-set message (#10) ... causes decoder, 203, to load ... at microcomputer, 205, the information segment of said message (which is the program instruction set of Q.1 and is the output file, PROGRAM.EXE, of said station).
processing said detected information transmission, in response to said at least one embedded signal, to	Page 484, lines 12 - 18	At the station of Figs. 7 and 7F, receiving the program- instruction-set message (#10) ... causes decoder, 203, to ... execute at microcomputer, 205, the information segment of said message (which is the program instruction set of Q.1 and is the output file, PROGRAM.EXE, of said station).
generate said television video image; and	Page 485, lines 14 - 18	Under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, of Figs. 7 and 7F generates image information of a first video overlay and generates selected information of subsequent overlays ...
causing said processor, in response to an instruct-to-clear signal,	Page 500, lines 10 - 15	... said 1st cease-outputting message (#10) causes decoder, 203, ... to input the aforementioned clear-and-continue instruction to the CPU of microcomputer,

		205. In the preferred embodiment, said instruction is inputted to said CPU as an interrupt signal.
to clear said generated television video image.	Page 500, lines 15 - 22	Receiving said clear-and-continue instruction ... causes microcomputer, 205, in a fashion well known in the art, to cease its current function, ... to execute a particular when-interrupted portion of said program instruction set of Q.1.
	Page 501, lines 5 - 17	Then, under control of the instructions of said when-interrupted portion, microcomputer, 205, ... clears video RAM; ...

9. (Amended) The method of claim 8, wherein the step of causing said processor to clear said generated television video image further includes the step of setting said generated television video image to a specific color.	Page 501, lines 16 - 18	... Automatically, under control of said instructions, microcomputer, 205, clears video RAM; sets the background color of video RAM to a transparent overlay black; ...

10. (Unchanged) The method of claim 8, further comprising the step of receiving said instruct-to-clear signal.	Page 499, line 23 - page 501, line 17	Then said program originating studio embeds and transmits said 1st cease-outputting message (#10). Said message is identical to the aforementioned third message of the "Wall Street Week" example. Receiving said 1st cease-outputting message (#10) causes each subscriber station to cease combining and to display only the transmitted video information at its monitor, 202M. At the station of Figs. 7 and 7F, decoder, 203, detects the information of said message, and receiving said 1st cease-outputting

		message (#10) causes decoder, 203, to execute "GRAPHICS OFF" at the PC-MicroKey System of microcomputer, 205. In so doing, decoder, 203, causes said PC-MicroKey to cease combining its specific image information with the conventional video information transmitted by said studio, to commence transmitting only the transmitted video information to monitor, 202M. Receiving said message causes each subscriber station then temporarily to stop generating and outputting said print output information, to prepare to combine a second specific video overlay image, then to resume generating and outputting said print output information. At the station of Figs. 7 and 7F, receiving said 1st cease-outputting message (#10) causes decoder, 203, after so executing "GRAPHICS OFF", to input the aforementioned clear-and-continue instruction to the CPU of microcomputer, 205. In the preferred embodiment, said instruction is inputted to said CPU as an interrupt signal. Receiving said clear-and-continue instruction as an interrupt signal causes microcomputer, 205, in a fashion well known in the art, to cease its current function, to store particular information at particular instruction-at-which-to- resume memory that identifies the location of the particular instruction at which to resume said function, and to execute a particular when-interrupted portion of said program instruction set of Q.1. Automatically, microcomputer, 205, ceases generating and transmitting said print output information, having just outputted information of "in exchange for this coupon and the sum of:" which causes printer, 221, to stop printing after printing "of:". (Simultaneously, receiving the interrupt signal of its station's clear-and-continue instruction at the microcomputer, 205, of the station of said second

		subscriber causes said microcomputer, 205, to cease generating and outputting its specific print output information, having just outputted information of "222 Second St." which causes the printer, 221, of said station to stop printing after printing "St.". And receiving its station's clear-and-continue instruction at the microcomputer, 205, of the station of said third subscriber causes said microcomputer, 205, to cease generating and outputting its specific print output information, having just outputted information of "$1,138.92" which causes the printer, 221, of said station to stop printing after printing ".92".) Then, under control of the instructions of said when-interrupted portion, microcomputer, 205, determines that said clear-and-continue instruction is the first instance of a clear-and-continue instruction that microcomputer, 205, has received while under control of said program instruction set of Q.1. So determining causes microcomputer, 205, to place "0" at particular Flag-interrupt register memory of said CPU that is normally "1" then to jump to a particular first-clear-and-continue address of the instructions of said program instruction set of Q.1 and to commence executing first-clear-and-continue instructions at said address. Automatically, under control of said instructions, microcomputer, 205, clears video RAM; ...

11. (**Amended**) The method of claim 10, wherein said instruct-clear-signal is	Page 499, line 23 - page 501, line 17	Then said program originating studio embeds and transmits said 1st cease-outputting message (#10). Said message is identical to the aforementioned third message of the "Wall Street Week" example. Receiving said 1st cease-outputting message (#10) causes each subscriber station to cease combining and to display

		only the transmitted video information at its monitor, 202M. At the station of Figs. 7 and 7F, decoder, 203, detects the information of said message, and receiving said 1st cease-outputting message (#10) causes decoder, 203, to execute "GRAPHICS OFF" at the PC-MicroKey System of microcomputer, 205. In so doing, decoder, 203, causes said PC-MicroKey to cease combining its specific image information with the conventional video information transmitted by said studio, to commence transmitting only the transmitted video information to monitor, 202M. Receiving said message causes each subscriber station then temporarily to stop generating and outputting said print output information, to prepare to combine a second specific video overlay image, then to resume generating and outputting said print output information. At the station of Figs. 7 and 7F, receiving said 1st cease-outputting message (#10) causes decoder, 203, after so executing "GRAPHICS OFF", to input the aforementioned clear-and-continue instruction to the CPU of microcomputer, 205. In the preferred embodiment, said instruction is inputted to said CPU as an interrupt signal. Receiving said clear-and-continue instruction as an interrupt signal causes microcomputer, 205, in a fashion well known in the art, to cease its current function, to store particular information at particular instruction-at-which-to- resume memory that identifies the location of the particular instruction at which to resume said function, and to execute a particular when-interrupted portion of said program instruction set of Q.1. Automatically, microcomputer, 205, ceases generating and transmitting said print output information, having just outputted information of "in exchange for this coupon and the sum of:" which causes

		printer, 221, to stop printing after printing "of:". (Simultaneously, receiving the interrupt signal of its station's clear-and-continue instruction at the microcomputer, 205, of the station of said second subscriber causes said microcomputer, 205, to cease generating and outputting its specific print output information, having just outputted information of "222 Second St." which causes the printer, 221, of said station to stop printing after printing "St.". And receiving its station's clear-and-continue instruction at the microcomputer, 205, of the station of said third subscriber causes said microcomputer, 205, to cease generating and outputting its specific print output information, having just outputted information of "$1,138.92" which causes the printer, 221, of said station to stop printing after printing ".92".) Then, under control of the instructions of said when-interrupted portion, microcomputer, 205, determines that said clear-and-continue instruction is the first instance of a clear-and-continue instruction that microcomputer, 205, has received while under control of said program instruction set of Q.1. So determining causes microcomputer, 205, to place "0" at particular Flag-interrupt register memory of said CPU that is normally "1" then to jump to a particular first-clear-and-continue address of the instructions of said program instruction set of Q.1 and to commence executing first-clear-and-continue instructions at said address. Automatically, under control of said instructions, microcomputer, 205, clears video RAM; ...
said at least one embedded signal.	Page 481, lines 6 - 9	... causing said decoder, 203, to commence identifying and processing the individual SPAM messages of the SPAM information subsequently embedded in the transmission of the programming of Q.

12. (Unchanged) The method of claim 8, further comprising the step of generating said instruct-to-clear signal in said receiver station.	Page 514, line 32 - page 515, line 34	(In addition to the above described functioning, transmitting said messages in examples #9 and #10 causes apparatus at subscriber stations of particularly slow microcomputers, 205, said field distribution system, 93, to function in the restoring efficiency fashion described above. Receiving each of said commence-outputting messages causes a decoder, 203, of at least one of said stations to input particular second-condition-test-failed instructions to its associated microcomputer, 205, causing said microcomputer, 205, to jump to and commence processing additional instructions of its received program instruction set of Q.1 rather than to commence outputting locally generated combined medium programming. For example, receiving said 1st commence-outputting message (#10) (or (#9)) causes at least one decoder, 203, of at least one station to input the aforementioned second-condition-test-failed instructions to a microcomputer, 205, causing at least one microcomputer, 205, to jump to and execute the instructions caused to be executed by the aforementioned clear-and-continue instructions described above. Automatically, said microcomputer, 205, ceases its current function; stores particular information at particular instruction-at-which-to- resume memory that identifies the location of the particular instruction at which to resume said function; executes the aforementioned when-interrupted portion of said program instruction set of Q.1 [or of Q in the case of example #9]; and determines, under control of the instructions of said portion, that said second-condition-test-failed instructions constitute the first instance of video overlay second- condition-test-failed instructions that microcomputer,

		205, has received while under control of said program instruction set of Q.1 [or of Q]. So determining causes said microcomputer, 205, to jump to the aforementioned first- clear-and-continue address of the instructions of said program instruction set of Q.1 [or of Q] and to commence executing first-clear-and-continue instructions at said address. Automatically, said microcomputer, 205, clears video RAM; ...

13. (**Amended**) The method of claim 12, wherein the step of generating said instruct-to-clear signal further includes the step of using said processor to generate said instruct-to–clear signal based on said at least one embedded signal.	Page 514, line 32 - page 515, line 34 (emphasis added)	(In addition to the above described functioning, transmitting said messages in examples #9 and #10 causes apparatus at subscriber stations of particularly slow microcomputers, 205, said field distribution system, 93, to function in the restoring efficiency fashion described above. *Receiving each of said commence-outputting messages causes* a decoder, 203, of at least one of said stations to input particular second-condition-test-failed instructions to its associated microcomputer, 205, causing said microcomputer, 205, to jump to and commence processing additional instructions of its received program instruction set of Q.1 rather than to commence outputting locally generated combined medium programming. *For example, receiving said 1st commence-outputting message (#10)* (or (#9)) causes at least one decoder, 203, of at least one station to input the aforementioned second-condition-test-failed instructions to a microcomputer, 205, causing at least one microcomputer, 205, to jump to and execute the instructions caused to be executed by the aforementioned clear-and-continue instructions described above. Automatically, said microcomputer, 205, ceases its current function; stores particular information at particular

		instruction-at-which-to- resume memory that identifies the location of the particular instruction at which to resume said function; executes the aforementioned when-interrupted portion of said program instruction set of Q.1 [or of Q in the case of example #9]; and determines, under control of the instructions of said portion, that said second-condition-test-failed instructions constitute the first instance of video overlay second- condition-test-failed instructions that microcomputer, 205, has received while under control of said program instruction set of Q.1 [or of Q]. So determining causes said microcomputer, 205, to jump to the aforementioned first- clear-and-continue address of the instructions of said program instruction set of Q.1 [or of Q] and to commence executing first-clear-and-continue instructions at said address. Automatically, said microcomputer, 205, clears video RAM; ...
	Page 490, line 24 - page 491, line 6 (emphasis added)	At this moment, said studio embeds and transmits said 1st commence-outputting message (#10). Said message consists of a "00" header; execution segment information that is identical to the execution segment of the second message of the "Wall Street Week" example, appropriate meter-monitor information including "program unit identification code" information and overlay number field information, and any required padding bits. And each intermediate transmission station (including the intermediate station of Fig. 6 and said second intermediate station) receives and retransmits said message. Receiving said message causes each subscriber station *that has completed the generation of first overlay image information* at video RAM to combine its specific image information with the conventional video information

		transmitted by said studio and cause its specific monitor, 202M, to display the combined specific image information and transmitted video information.

14. (**Amended**) The method of claim 8, wherein said received television programming includes only part of a television program, said method further comprising the steps of:	Page 490, lines 11 - 23	Said studio transmits television picture information of the upper torso of a person and audio information of an announcer saying, "For a limited time only, Super Discount Supermarkets make this special offer to you. Super Discount Supermarkets will deliver to you, at cost, all the pork you need to entertain five hundred people for this low, low price ... " Said studio transmits television picture information of the right hand and arm of said person pointing moving to point at the upper left hand corner of the television screen.
	Page 491, lines 13 - 16	And automatically ... is displayed at the upper left hand corner of the picture screen of monitor, 202M, which is the corner to which the image of the person shown at said screen is pointing.
generating a balance of said television program; and	Page 485, lines 14 - 16	Under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, of Figs. 7 and 7F generates image information of a first video overlay ...
	Page 486, lines 9 - 27	Then automatically, on a machine language basis and in a fashion well known in the art, said microcomputer, 205, substitutes the value 4.3 for the variable X in the equation: $Y = 1000.00 + 62.21875 + (2.117 * X)$ computes the value of Y that is specific the the station of Figs. 7 and 7F to be: 1071.32 (rounded in a fashion well known in the art); and stores 1071.32 information at particular 2nd working memory of said

		microcomputer, 205. Automatically, microcomputer, 205, clears video RAM; causes the background color of video RAM to be a color such as black that is transparent when combined with transmitted video by the PC-MicroKey System; causes binary image information of "$1,071.32" to be placed at bit locations of video RAM that produce video image information in the upper left hand of a video screen when video RAM information is transmitted to said screen.
synchronizing delivery of said received part of said television program and said generated balance of said television program at	Page 491, lines 10 - 16	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "$1,071.32" with its received conventional video information. And automatically $1,071.32 is displayed at the upper left hand corner of the picture screen of monitor, 202M, which is the corner to which the image of the person shown at said screen is pointing.
at least one of said television monitor	Page 491, lines 13 - 16	And automatically $1,071.32 is displayed at the upper left hand corner of the picture screen of monitor, 202M, which is the corner to which the image of the person shown at said screen is pointing.
and a television storage device.	Page 491, lines 10 - 13	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "$1,071.32" with its received conventional video information.
	Page 25, line 35 - page 26, line 8	Said signal is identified by decoder, 203; transferred to microcomputer, 205; and executed by microcomputer, 205, at the system level as the statement, "GRAPHICS ON". Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.

15. (**Amended**) The method of claim 14, wherein a memory is operatively connected to said at least one of said television monitor and said television storage device,	Page 491, lines 10 - 16	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "$1,071.32" with its received conventional video information. And automatically $1,071.32 is displayed at the upper left hand corner of the picture screen of monitor, 202M, which is the corner to which the image of the person shown at said screen is pointing.
and wherein said step of synchronizing further comprises placing said generated balance of said television program at said memory	Page 486, lines 20 - 27	Automatically, microcomputer, 205, ... causes binary image information of "$1,071.32" to be placed at bit locations of video RAM that produce video image information in the upper left hand of a video screen when video RAM information is transmitted to said screen.
and clearing at least some of said memory.	Page 501, lines 16 - 17	Automatically, under control of said instructions, microcomputer, 205, clears video RAM; ...

16. (**Amended**) The method of claim 14, wherein a memory is operatively connected to said at least one of said television monitor and said television storage device,	Page 491, lines 10 - 16	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "$1,071.32" with its received conventional video information. And automatically $1,071.32 is displayed at the upper left hand corner of the picture screen of monitor, 202M, which is the corner to which the image of the person shown at said screen is pointing.
said generated balance of said television program includes a receiver specific datum,	Page 485, lines 14 - 16	Under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, of Figs. 7 and 7F generates image information of a first video overlay ...
	Page 486, lines 9 - 19	memory of said microcomputer, 205. Then automatically, on a machine language basis and in a fashion well

		known in the art, said microcomputer, 205, substitutes the value 4.3 for the variable X in the equation: Y = 1000.00 + 62.21875 + (2.117 * X) computes the value of Y that is specific the the station of Figs. 7 and 7F to be: 1071.32 (rounded in a fashion well known in the art); and stores 1071.32 information at particular 2nd working memory of said microcomputer, 205.
and wherein said step of synchronizing further comprises placing said receiver specific datum	Page 486, lines 20 - 27	Automatically, microcomputer, 205, ... causes binary image information of "$1,071.32" to be placed at bit locations of video RAM that produce video image information in the upper left hand of a video screen when video RAM information is transmitted to said screen.
at said memory and clearing at least some of said memory.	Page 501, lines 16 - 17	Automatically, under control of said instructions, microcomputer, 205, clears video RAM; sets the

17. (**Amended**) The method of claim 14, wherein said at least one processor performs at least one of said steps of generating said balance	Page 485, lines 14 - 16	Under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, of Figs. 7 and 7F generates image information of a first video overlay ...
	Page 486, lines 9 - 19	Then automatically, on a machine language basis and in a fashion well known in the art, said microcomputer, 205, substitutes the value 4.3 for the variable X in the equation: Y = 1000.00 + 62.21875 + (2.117 * X) computes the value of Y that is specific the the station of Figs. 7 and 7F to be: 1071.32 (rounded in a fashion well known in the art); and stores 1071.32 information at particular 2nd working memory of said

		microcomputer, 205.
and synchronizing delivery, and wherein said method further comprises the step of	Page 486, lines 20 - 27	Automatically, microcomputer, 205, clears video RAM; causes the background color of video RAM to be a color such as black that is transparent when combined with transmitted video by the PC-MicroKey System; causes binary image information of "$1,071.32" to be placed at bit locations of video RAM that produce video image information in the upper left hand of a video screen when video RAM information is transmitted to said screen.
	Page 491, lines 10 - 16	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "$1,071.32" with its received conventional video information. And automatically $1,071.32 is displayed at the upper left hand corner of the picture screen of monitor, 202M, which is the corner to which the image of the person shown at said screen is pointing.
detecting processor instructions in said information transmission	Page 484, lines 12 - 18	At the station of Figs. 7 and 7F, receiving the program- instruction-set message (#10) transmitted by the intermediate transmission station of Fig. 6 causes said message to be detected at decoder, 203, and causes decoder, 203, to load and execute at microcomputer, 205, the information segment of said message (which is the program instruction set of Q.1 and is the output file, PROGRAM.EXE, of said station).
which operate to generate said balance or synchronize said delivery.	Page 485, lines 14 - 16	Under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, of Figs. 7 and 7F generates image information of a first video overlay ...
	Page 486, lines 9 - 27	Then automatically, on a machine language basis and in a fashion well known in the art, said microcomputer, 205, substitutes the value 4.3 for the variable X in the equation:

		Y = 1000.00 + 62.21875 + (2.117 * X) computes the value of Y that is specific the the station of Figs. 7 and 7F to be: 1071.32 (rounded in a fashion well known in the art); and stores 1071.32 information at particular 2nd working memory of said microcomputer, 205. Automatically, microcomputer, 205, clears video RAM; causes the background color of video RAM to be a color such as black that is transparent when combined with transmitted video by the PC-MicroKey System; causes binary image information of "$1,071.32" to be placed at bit locations of video RAM that produce video image information in the upper left hand of a video screen when video RAM information is transmitted to said screen.

18. (**Amended**) The method of claim 14, wherein said step of generating said balance of said television program comprises computing said balance of said television program.	Page 485, lines 14 - 16	Under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, of Figs. 7 and 7F generates image information of a first video overlay ...
	Page 486, lines 9 - 27	memory of said microcomputer, 205. Then automatically, on a machine language basis and in a fashion well known in the art, said microcomputer, 205, substitutes the value 4.3 for the variable X in the equation: Y = 1000.00 + 62.21875 + (2.117 * X) computes the value of Y that is specific the the station of Figs. 7 and 7F to be: 1071.32 (rounded in a fashion well known in the art); and stores 1071.32 information at particular 2nd working memory of said microcomputer, 205. Automatically, microcomputer, 205, clears video RAM; causes the background color of video

		RAM to be a color such as black that is transparent when combined with transmitted video by the PC-MicroKey System; causes binary image information of "$1,071.32" to be placed at bit locations of video RAM that produce video image information in the upper left hand of a video screen when video RAM information is transmitted to said screen.
	Page 491, lines 10 - 16	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "$1,071.32" with its received conventional video information. And automatically $1,071.32 is displayed at the upper left hand corner of the picture screen of monitor, 202M, which is the corner to which the image of the person shown at said screen is pointing.

19. (**Amended**) The method of claim 17, wherein a controller	Page 480, lines 14 - 17 See Fig. 7E.	In so doing, receiving said message causes matrix switch, 258, to interconnect the apparatus of said station in the fashion of Fig. 7E.
	Page 34, lines 21 - 28 Fig. 2A is referenced in Fig. 7E.	Fig. 2A shows a TV signal decoder that detects signal information embedded in an inputted television frequency, renders said information into digital signals that subscriber station apparatus can process, identifies the particular apparatus to which said signals are addressed, and outputs said signals to said apparatus. Decoder, 203, in Fig. 1 is one such TV signal decoder; decoder, 30, in Fig. 2 is another.
	Page 36, lines 32 - 33 See Fig. 2A.	Each decoder is controlled by a controller, 39, 44, or 47, that has buffer, microprocessor, ROM, and RAM capacities.
	Page 156, line 33. See Fig. 3A.	Fig. 3A shows one such preferred controller, 39.

communicates said processor instructions to said at least one processor.	Page 484, lines 12 - 18	At the station of Figs. 7 and 7F, receiving the program- instruction-set message (#10) transmitted by the intermediate transmission station of Fig. 6 causes said message to be detected at decoder, 203, and causes decoder, 203, to load and execute at microcomputer, 205, the information segment of said message (which is the program instruction set of Q.1 and is the output file, PROGRAM.EXE, of said station).

20. (**Amended**) The method of claim 14, wherein a controller	Page 480, lines 14 - 17 See Fig. 7E.	In so doing, receiving said message causes matrix switch, 258, to interconnect the apparatus of said station in the fashion of Fig. 7E.
	Page 34, lines 21 - 28 Fig. 2A is referenced in Fig. 7E.	Fig. 2A shows a TV signal decoder that detects signal information embedded in an inputted television frequency, renders said information into digital signals that subscriber station apparatus can process, identifies the particular apparatus to which said signals are addressed, and outputs said signals to said apparatus. Decoder, 203, in Fig. 1 is one such TV signal decoder; decoder, 30, in Fig. 2 is another.
	Page 36, lines 32 - 33 See Fig. 2A.	Each decoder is controlled by a controller, 39, 44, or 47, that has buffer, microprocessor, ROM, and RAM capacities.
	Page 156, line 33 See Fig. 3A.	Fig. 3A shows one such preferred controller, 39.
controls said at least one processor to perform at least one of said steps of generating said balance and synchronizing	Page 484, lines 12 - 18	At the station of Figs. 7 and 7F, receiving the program- instruction-set message (#10) transmitted by the intermediate transmission station of Fig. 6 causes said message to be detected at decoder, 203, and causes decoder, 203, to load and execute at microcomputer, 205, the

delivery, said method further comprising the step of		information segment of said message (which is the program instruction set of Q.1 and is the output file, PROGRAM.EXE, of said station).
	Page 486, lines 9 - 27 See also the support for claim 19.	Then automatically, on a machine language basis and in a fashion well known in the art, said microcomputer, 205, substitutes the value 4.3 for the variable X in the equation: Y = 1000.00 + 62.21875 + (2.117 * X) computes the value of Y that is specific the the station of Figs. 7 and 7F to be: 1071.32 (rounded in a fashion well known in the art); and stores 1071.32 information at particular 2nd working memory of said microcomputer, 205. Automatically, microcomputer, 205, clears video RAM; causes the background color of video RAM to be a color such as black that is transparent when combined with transmitted video by the PC-MicroKey System; causes binary image information of "$1,071.32" to be placed at bit locations of video RAM that produce video image information in the upper left hand of a video screen when video RAM information is transmitted to said screen.
	Page 491, lines 10 - 16	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "$1,071.32" with its received conventional video information. And automatically $1,071.32 is displayed at the upper left hand corner of the picture screen of monitor, 202M, which is the corner to which the image of the person shown at said screen is pointing.
communicating said instruct-to-clear signal from said controller to said at least one processor.	Page 500, line 9 - page 501, line 29	At the station of Figs. 7 and 7F, receiving said 1st cease-outputting message (#10) causes decoder, 203, after so executing "GRAPHICS OFF", to input the aforementioned clear-and-continue instruction to the CPU of microcomputer, 205. In the preferred embodiment, said

		instruction is inputted to said CPU as an interrupt signal. Receiving said clear-and-continue instruction as an interrupt signal causes microcomputer, 205, in a fashion well known in the art, to cease its current function, to store particular information at particular instruction-at-which-to- resume memory that identifies the location of the particular instruction at which to resume said function, and to execute a particular when-interrupted portion of said program instruction set of Q.1. Automatically, microcomputer, 205, ceases generating and transmitting said print output information, having just outputted information of "in exchange for this coupon and the sum of:" which causes printer, 221, to stop printing after printing "of:". (Simultaneously, receiving the interrupt signal of its station's clear-and-continue instruction at the microcomputer, 205, of the station of said second subscriber causes said microcomputer, 205, to cease generating and outputting its specific print output information, having just outputted information of "222 Second St." which causes the printer, 221, of said station to stop printing after printing "St.". And receiving its station's clear-and-continue instruction at the microcomputer, 205, of the station of said third subscriber causes said microcomputer, 205, to cease generating and outputting its specific print output information, having just outputted information of "$1,138.92" which causes the printer, 221, of said station to stop printing after printing ".92".) Then, under control of the instructions of said when-interrupted portion, microcomputer, 205, determines that said clear-and-continue instruction is the first instance of a clear-and-continue instruction that microcomputer, 205, has received while under control of said program instruction set of Q.1. So determining causes microcomputer, 205, to place "0" at

		particular Flag-interrupt register memory of said CPU that is normally "1" then to jump to a particular first-clear-and-continue address of the instructions of said program instruction set of Q.1 and to commence executing first-clear-and-continue instructions at said address. Automatically, under control of said instructions, microcomputer, 205, clears video RAM; sets the background color of video RAM to a transparent overlay black; determines that the aforementioned 1st working memory of said microcomputer, 205, holds southwest-quadrant information; selects from said D:DATA_OF.ITS file information of the aforementioned southwest delivery route telephone number, "456-1414", and causes binary image information of said number to be placed at bit locations that produce video image information in the lower middle portion of a video screen. (Under control of the first-clear-and-continue instructions of its station's program instruction set of Q.1, the microcomputer, 205, of the station of said second subscriber clears video RAM; ...

21. (**Amended**) The method of claim 20, wherein said controller communicates said instruct-to-clear signal to interrupt said at least one processor.	Page 500, lines 9 - 15	At the station of Figs. 7 and 7F, receiving said 1st cease-outputting message (#10) causes decoder, 203, after so executing "GRAPHICS OFF", to input the aforementioned clear-and-continue instruction to the CPU of microcomputer, 205. In the preferred embodiment, said instruction is inputted to said CPU as an interrupt signal.

24. (Unchanged) A method of generating	Page 40, lines 17 - 25	The signals of the present invention are the modalities whereby stations that

		originate programming transmissions control the handling, generating, and displaying of programming at subscriber stations. (The term, "SPAM," is used, hereinafter, to refer to signal processing apparatus and methods of the present invention.) SPAM signals control and coordinate a wide variety of subscriber stations.
a television	Page 478, lines 23 - 26	Then said studio ... commences transmitting the conventional television video and audio information of program unit Q.
display	Page 490, lines 21 - 23	Said studio transmits television picture information of the right hand and arm of said person pointing moving to point at the upper left hand corner of the television screen.
	Page 491, lines 10 - 16	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "$1,071.32" with its received conventional video information. And automatically $1,071.32 is displayed at the upper left hand corner of the picture screen of monitor, 202M, which is the corner to which the image of the person shown at said screen is pointing.
in at least one of	Page 470, line 9	At the station of Fig. 7 and 7F ...
a plurality of receiver stations,	Page 470, lines 9 - 12	At the station of Fig. 7 and 7F (which station is a subscriber station of the intermediate station of Fig. 6), in the fashions described above, apparatus is caused to receive the particular transmission of said program ...
	Page 470, lines 27 - 31	(Simultaneously and in the same fashion, apparatus of the station of said second subscriber [which station is a subscriber station of the intermediate station of Fig. 6] receives, ... the

		information of said transmission.
each of said plurality of receiver stations having a processor for generating	Page 485, lines 14 - 18	Under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, of Figs. 7 and 7F generates image information of a first video overlay and generates selected information of subsequent overlays in the following fashion.
	Page 486, line 27 - page 487, line 8	(Simultaneously, under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, at the station of said second subscriber ... causes binary image information of "$1,080.64" to be placed at particular upper left hand video screen bit locations of video RAM.
a television	Page 478, lines 23 - 26	Then said studio ... commences transmitting the conventional television video and audio information of program unit Q.
	Page 490, lines 21 - 23	Said studio transmits television picture information of the right hand and arm of said person pointing moving to point at the upper left hand corner of the television screen.
video image and a television monitor for displaying transmitted television programming and said television video image, said method comprising the steps of:	Page 491, lines 10 - 24	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "$1,071.32" with its received conventional video information. And automatically $1,071.32 is displayed at the upper left hand corner of the picture screen of monitor, 202M, which is the corner to which the image of the person shown at said screen is pointing. (Simultaneously and in the same fashion, apparatus at the station of said second subscriber causes the specific video RAM image information of said station, which is "$1,080.64", to be displayed at the upper left hand corner of the picture screen of the monitor, 202M, of said station and said subscriber can see the

		image said person pointing at $1,080.64.
	Page 490, lines 21 - 23	Said studio transmits television picture information of the right hand and arm of said person pointing moving to point at the upper left hand corner of the television screen.
(1) receiving,	Page 343, lines 26 - 32	Automatically, at the station of Fig. 6, the computer, 73, instructs ... receiver, 53, ... receive the transmission of the frequency of the transponder 23 of said satellite.
	Page 344, lines 24 – 31 (emphasis added)	... said remote distribution station commences transmitting programming by satellite up-link means, well known in the art. Said programming consists of a sequence of the program units of 26 spot commercials, each of thirty seconds duration. In succession, said station transmits units A, B, C, D, ... P, ***Q,*** R, ... Embedded in each of said program units are SPAM messages ...
	Please note page 347, lines 4 - 5	... causing said recorder, 76, to record the programming of program unit Q ...
	Page 372, lines 22 - 28	... SPAM messages that are embedded in the prerecorded programming of Q. (Hereinafter, said messages are called ... the "1st cease- outputting message (#9)", ...
in a transmitter station,	Page 324, lines 11 - 21	The stations so automated may transmit any form of electronically transmitted programming, including television, radio, print, data, and combined medium programming and may range in scale of operation from wireless broadcast stations that transmit a single programming transmission to cable systems that cablecast many channels simultaneously. Fig. 6 illustrates Signal Processing Apparatus and Methods at an intermediate transmission station that is a cable

		television system "head end" and that cablecasts several channels of television programming.
an instruct-to-clear	Page 500, lines 10 - 15	... receiving said 1st cease-outputting message (#10) causes decoder, 203, ... to input the aforementioned clear ... instruction to the CPU of microcomputer, 205. In the preferred embodiment, said instruction is inputted to said CPU as an interrupt signal.
signal;	Page 40, lines 17 - 20	The signals of the present invention are the modalities whereby stations that originate programming transmissions control the handling, generating, and displaying of programming at subscriber stations.
(2) receiving, in said transmitter station, a control signal	Page 367, line 2	Receiving said message ...
	Page 59, lines 29 - 31	A SPAM message is the modality whereby the original transmission station that originates said message controls specific addressed apparatus at subscriber stations.
which operates at said transmitter station to communicate said instruct-to-clear signal to a transmitter; and	Page 367, lines 2 - 9	Receiving said message and mark causes computer, 73, to cause recorder, 76, to commence playing and to cause matrix switch, 75, to configure its switches so as ... to commence transferring the output of recorder, 76, to modulator, 83, ...
	Page 372, lines 20 - 28	Subsequently, ... recorder, 76, plays ... the programming of Q, ... SPAM messages that are embedded in the prerecorded programming of Q. ... the "1st cease- outputting message (#9)", ...
(3) transmitting said instruct-to-clear signal,	Page 367, lines 8 - 9	... which causes the transmission of unit Q to field distribution system, 93.

	Page 372, lines 20 - 28	... transmits the programming of Q, via modulator, 83, to field distribution system, 93, recorder, 76, transmits eight SPAM messages that are embedded in the prerecorded programming of Q. (Hereinafter, said messages are called ... the "1st cease- outputting message (#9)", ...
said instruct-to-clear signal effective in at least one of said plurality of receiver stations to cause said processor to clear said television video image or to change said television video image to a specific color.	Page 500, lines 9 - 15	At the station of Figs. 7 and 7F, receiving said 1st cease-outputting message (#10) causes decoder, 203, ... to input the aforementioned clear ... instruction to the CPU of microcomputer, 205. In the preferred embodiment, said instruction is inputted to said CPU as an interrupt signal.
	Page 500, lines 15 - 22	Receiving said clear ... instruction as an interrupt signal causes microcomputer, 205, ... to execute a particular when-interrupted portion of said program instruction set of Q.1.
	Page 501, lines 5 - 7	Then, under control of the instructions of said when-interrupted portion, microcomputer, 205, determines ...
	Page 501, lines 16 - 18	Automatically, under control of said instructions, microcomputer, 205, clears video RAM; sets the background color of video RAM to ... black; ...

25. (**Amended**) The method of claim 24, further comprising the steps of: originating	Page 59, lines 29 - 33	A SPAM message is the modality whereby the original transmission station that originates said message controls specific addressed apparatus at subscriber stations. The information of any given SPAM transmission consists of a series or

		stream of sequentially transmitted SPAM messages.
	Page 499, lines 23 - 26	Then said program originating studio embeds ... said 1st cease-outputting message (#10). Said message is identical to the aforementioned third message of the "Wall Street Week" example.
	Page 25, lines 24 - 25	... monitor, 202M, displays the conventional television image and the sound of the transmitted "Wall Street Week" program.
	Page 26, lines 8 - 11	TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
	Page 89, lines 3 - 4	Each example focuses on the processing of the three signal messages of the Fig. 1C combining.
	Page 90, lines 28 - 29	The third message is of the information associated with the third combining synch command.
a first instruction specifying a control function to be executed;	Page 90, lines 29 - 31	Said third command has only ... and an execution segment and addresses URS microcomputers, 205.
	Page 45, lines 22 - 24	Execution segment information includes the subscriber station apparatus that the command of said segment addresses and the controlled functions said apparatus is to perform.
	Page 44, lines 22 - 25	(Hereinafter, functions that execution segment information causes subscriber station apparatus to perform are called "controlled functions.")
originating	See the support in the immediately preceding	

	"originating" step.	
a second instruction	Page 90, lines 29 - 30	Said third command has only a "10" header and ...
specifying	Page 45, lines 10 - 13	... commands are identified by one of three binary headers: 10 - a command with an execution segment alone; ...
	Page 44, lines 17 - 18	A command is always constituted of at least a header and an execution segment.
a data characteristic selected from the group consisting of	Page 14, line 35 - page 15, line 2	Examples of signal words are a string of one or more digital data bits encoded together on a single line of video or sequentially in audio.
structure,	Page 57, lines 5 - 9	... message structure is also of critical importance. The single, unified system of the present invention must have capacity for communicating to many different apparatus messages that vary greatly in complexity, length, and priority for speed of processing.
	For example, page 90, lines 28 - 30	The third message is of the information associated with the third combining synch command. Said third command has only a "10" header and an execution segment ...
length,	Page 60, lines 25 - 29	First priority segment information has the highest priority for speedy processing and is of fixed binary bit length. A SPAM header is one example of a first priority segment. An execution segment is another example.
and format; and	Page 57, lines 9 - 12	By providing first priority segment capacity--in the simplest preferred embodiment, execution segments--that is short, rigid in format, and can communicate information ...
organizing	Page 59, line 21 *et*	THE ORGANIZATION OF MESSAGE

	seq.	STREAMS ... MESSAGES, ...
said first and second instructions in a sequence,	Page 66, lines 10 - 14	The third message consists of a command alone. The form of said third message is identical to the form of the information of Fig. 2J, given eight-bit bytes as the signal words of Fig. 2I. Fig. 2J shows a message that is composed just of a "10" header and an execution segment.
said sequence comprising said instruct-to-clear signal.	Page 499, lines 23 - 26	Then said program originating studio embeds and transmits said 1st cease-outputting message (#10). Said message is identical to the aforementioned third message of the "Wall Street Week" example.
	Page 90, lines 28 - 31	The third message is of the information associated with the third combining synch command. Said third command has only a "10" header and an execution segment and addresses URS microcomputers, 205.
	Page 500, lines 9 - 15	At the station of Figs. 7 and 7F, receiving said 1st cease-outputting message (#10) causes decoder, 203, ... to input the aforementioned clear ... instruction to the CPU of microcomputer, 205.

26. (Unchanged) The method of claim 24, further comprising the step of transmitting processor instructions	Page 371, lines 12 - 19	... causes computer, 73, to generate a second outbound SPAM message that includes information of said program instruction set of Q and to cause said message to be embedded in the transmission of the programming of Q and transmitted to field distribution system, 93, in the following fashion. (Hereinafter, said second outbound SPAM message is called the "program-instruction-set message (#9).")
	Page 24, lines 14 - 16	(Hereinafter, such a set of instructions

		that is loaded and run is called a "program instruction set.")
which operate at said receiver station	Page 484, lines 12 - 17	At the station of Figs. 7 and 7F, receiving the program- instruction-set message (#10) transmitted by the intermediate transmission station of Fig. 6 causes said message to be detected at decoder, 203, and causes decoder, 203, to load and execute at microcomputer, 205, the information segment of said message (which is the program instruction set of Q.1 ...
to generate information	Page 485, lines 14 - 18	Under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, of Figs. 7 and 7F generates image information of a first video overlay and generates selected information of subsequent overlays in the following fashion.
	Page 486, lines 20 - 27	Automatically, microcomputer, 205, ... causes binary image information of "$1,071.32" to be placed at bit locations of video RAM that produce video image information in the upper left hand of a video screen when video RAM information is transmitted to said screen.
to be displayed	Page 491, lines 10 - 16	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "$1,071.32" with its received conventional video information. And automatically $1,071.32 is displayed at the upper left hand corner of the picture screen of monitor, 202M, which is the corner to which the image of the person shown at said screen is pointing.
and subsequently to be cleared	Page 500, lines 15 - 22	Receiving said clear ... instruction as an interrupt signal causes microcomputer, 205, ... to execute a particular when-interrupted portion of said program instruction set of Q.1.
	Page 501, lines 5 - 7	Then, under control of the instructions of

		said when-interrupted portion, microcomputer, 205, determines ...
	Page 501, lines 16 - 18	Automatically, under control of said instructions, microcomputer, 205, clears video RAM; ...
in response to said instruct-to-clear signal.	Page 500, lines 9 - 15	At the station of Figs. 7 and 7F, receiving said 1st cease-outputting message (#10) causes decoder, 203, ... to input the aforementioned clear ... instruction to the CPU of microcomputer, 205.

27. (**Amended**) The method of claim 24, further comprising the step of transmitting data	Page 369, lines 23 - 31	... causes computer, 73, to generate a particular first outbound SPAM message that includes information of the aforementioned data file, DATA_OF.ITS, whose information constitutes a complete instance of a data module set of Q and to cause said message to be embedded in the transmission of the programming of Q and transmitted to field distribution system, 93, in the following fashion. (Hereinafter, said first outbound SPAM message is called the "data-module-set message (#9).")
to be	Page 483, lines 2 - 13	At the station of Figs. 7 and 7F, receiving the data-module-set message (#10) transmitted by the intermediate transmission station of Fig. 6 causes said message to be detected at decoder, 203, and causes decoder, 203, to load and execute at microcomputer, 205, the information segment of said message (which includes complete information of the aforementioned data file, DATA_OF.ITS, of said station). Executing said information causes microcomputer, 205, to place said complete information at a so-called "D:" RAM disk at the RAM of said microcomputer, 205, in a file entitled, at the directory of said disk,

		"DATA_OF.ITS".
	Page 501, lines 17 - 25	... microcomputer, 205, ... selects from said D:DATA_OF.ITS file information of the aforementioned southwest delivery route telephone number, "456-1414", and causes binary image information of said number to be placed at bit locations that produce video image information in the lower middle portion of a video screen.
displayed	Page 506, lines 17 - 21	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "456-1414" with its received conventional video information. And automatically 456-1414 is displayed in the lower middle portion of the picture screen of monitor, 202M.
based on said instruct-to-clear signal.	Page 500, lines 9 - 15	At the station of Figs. 7 and 7F, receiving said 1st cease-outputting message (#10) causes decoder, 203, ... to input the aforementioned clear ... instruction to the CPU of microcomputer, 205.
	Page 500, lines 15 - 22	Receiving said clear ... instruction as an interrupt signal causes microcomputer, 205, ... to execute a particular when-interrupted portion of said program instruction set of Q.1.
	Page 501, lines 5 - 7	Then, under control of the instructions of said when-interrupted portion, microcomputer, 205, determines ...
	Page 501, lines 16 - 25	Automatically, under control of said instructions, microcomputer, 205, clears video RAM; sets the background color of video RAM to a transparent overlay black; ... selects from said D:DATA_OF.ITS file information of the aforementioned southwest delivery route telephone number, "456-1414", and causes binary image information of said number to be placed at bit locations that produce video image information in the lower middle

		portion of a video screen.

28. (**Amended**) A method of generating	Page 40, lines 17 - 25	The signals of the present invention are the modalities whereby stations that originate programming transmissions control the handling, generating, and displaying of programming at subscriber stations. (The term, "SPAM," is used, hereinafter, to refer to signal processing apparatus and methods of the present invention.) SPAM signals control and coordinate a wide variety of subscriber stations.
a television	Page 478, lines 23 - 26	Then said studio ... commences transmitting the conventional television video and audio information of program unit Q.
display	Page 490, lines 21 - 23	Said studio transmits television picture information of the right hand and arm of said person pointing moving to point at the upper left hand corner of the television screen.
	Page 491, lines 10 - 16	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "$1,071.32" with its received conventional video information. And automatically $1,071.32 is displayed at the upper left hand corner of the picture screen of monitor, 202M, which is the corner to which the image of the person shown at said screen is pointing.
in at least one of	Page 470, line 9	At the station of Fig. 7 and 7F ...
a plurality of receiver stations,	Page 470, lines 9 - 12	At the station of Fig. 7 and 7F (which station is a subscriber station of the intermediate station of Fig. 6), in the fashions described above, apparatus is caused to receive the particular transmission of said program ...

	Page 470, lines 27 - 31	(Simultaneously and in the same fashion, apparatus of the station of said second subscriber [which station is a subscriber station of the intermediate station of Fig. 6] receives, ... the information of said transmission.
each of said plurality of receiver stations having a processor for generating	Page 485, lines 14 - 18	Under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, of Figs. 7 and 7F generates image information of a first video overlay and generates selected information of subsequent overlays in the following fashion.
	Page 486, line 27 - page 487, line 8	(Simultaneously, under control of the instructions of said program instruction set of Q.1, the microcomputer, 205, at the station of said second subscriber ... causes binary image information of "$1,080.64" to be placed at particular upper left hand video screen bit locations of video RAM.
a television	Page 478, lines 23 - 26	Then said studio ... commences transmitting the conventional television video and audio information of program unit Q.
	Page 490, lines 21 - 23	Said studio transmits television picture information of the right hand and arm of said person pointing moving to point at the upper left hand corner of the television screen.
video image and a television monitor for displaying transmitted television programming and said television video image, said method comprising the steps of:	Page 491, lines 10 - 24	Automatically, microcomputer, 205, combines its specific video RAM binary image information of "$1,071.32" with its received conventional video information. And automatically $1,071.32 is displayed at the upper left hand corner of the picture screen of monitor, 202M, which is the corner to which the image of the person shown at said screen is pointing. (Simultaneously and in the same fashion, apparatus at the station of said second subscriber causes the specific video RAM

		image information of said station, which is "$1,080.64", to be displayed at the upper left hand corner of the picture screen of the monitor, 202M, of said station and said subscriber can see the image said person pointing at $1,080.64.
	Page 490, lines 21 - 23	Said studio transmits television picture information of the right hand and arm of said person pointing moving to point at the upper left hand corner of the television screen.
(1) receiving,	Page 343, lines 26 - 32	Automatically, at the station of Fig. 6, the computer, 73, instructs ... receiver, 53, ... to receive the transmission of the frequency of the transponder 23 of said satellite.
	Page 344, lines 24 – 31 (emphasis added)	... said remote distribution station commences transmitting programming by satellite up-link means, well known in the art. Said programming consists of a sequence of the program units of 26 spot commercials, each of thirty seconds duration. In succession, said station transmits units A, B, C, ... P, ***Q***, R, ... Embedded in each of said program units are SPAM messages ...
	Page 372, lines 22 - 28	... SPAM messages that are embedded in the ... programming of Q. (Hereinafter, said messages are called ... the "1st cease-outputting message (#9)", ...
in a transmitter station,	Page 324, lines 11 - 21	The stations so automated may transmit any form of electronically transmitted programming, including television, radio, print, data, and combined medium programming and may range in scale of operation from wireless broadcast stations that transmit a single programming transmission to cable systems that cablecast many channels simultaneously. Fig. 6 illustrates Signal Processing Apparatus and Methods at an intermediate

		transmission station that is a cable television system "head end" and that cablecasts several channels of television programming.
an instruct-to-clear	Page 500, lines 10 - 15	... receiving said 1st cease-outputting message (#10) causes decoder, 203, ... to input the aforementioned clear ... instruction to the CPU of microcomputer, 205. In the preferred embodiment, said instruction is inputted to said CPU as an interrupt signal.
signal;	Page 40, lines 17 - 20	The signals of the present invention are the modalities whereby stations that originate programming transmissions control the handling, generating, and displaying of programming at subscriber stations.
(2) storing, in said transmitter station, said received instruct-to-clear signal; and	Page 347, lines 4 - 5	... causing said recorder, 76, to record the programming of program unit Q ...
	Page 372, lines 22 - 28	SPAM messages ... in the prerecorded programming of Q. (Hereinafter, said messages are called ... the "1st cease-outputting message (#9)", ...
(3) causing said received and stored instruct-to-clear signal to be communicated to a transmitter	Page 367, lines 2 - 9	... causes computer, 73, to cause recorder, 76, to commence playing and to cause matrix switch, 75, to configure its switches so as ... to commence transferring the output of recorder, 76, to modulator, 83, ...
	Page 372, lines 20 - 28	Subsequently, ... recorder, 76, plays ... the programming of Q, ... SPAM messages that are embedded in the prerecorded programming of Q. ... the "1st cease- outputting message (#9)", ...
at a specific time,	Page 366, lines 19 - 20	... at the scheduled time of the playing of Q, ...
thereby to transmit	Page 367, lines 8 - 9	... which causes the transmission of unit

said received and stored instruct-to-clear signal,		Q to field distribution system, 93.
	Page 372, lines 20 - 28	... transmits the programming of Q, via modulator, 83, to field distribution system, 93, recorder, 76, transmits eight SPAM messages that are embedded in the prerecorded programming of Q. (Hereinafter, said messages are called ... the "1st cease- outputting message (#9)", ...
said received and stored instruct-to-clear signal effective in at least one of said plurality of receiver stations to cause said processor to clear said television video image or to change said television video image to a specific color.	Page 500, lines 9 - 15	At the station of Figs. 7 and 7F, receiving said 1st cease-outputting message (#10) causes decoder, 203, ... to input the aforementioned clear ... instruction to the CPU of microcomputer, 205. In the preferred embodiment, said instruction is inputted to said CPU as an interrupt signal.
	Page 500, lines 15 - 22	Receiving said clear ... instruction as an interrupt signal causes microcomputer, 205, ... to execute a particular when-interrupted portion of said program instruction set of Q.1.
	Page 501, lines 5 - 7	Then, under control of the instructions of said when-interrupted portion, microcomputer, 205, determines ...
	Page 501, lines 16 - 18	Automatically, under control of said instructions, microcomputer, 205, clears video RAM; sets the background color of video RAM to ... black; ...

29. (**Amended**) The method of claim 28, wherein said receiver station is capable of	Page 470, lines 9 - 12	At the station of Fig. 7 and 7F (which station is a subscriber station of the intermediate station of Fig. 6), in the fashions described above, apparatus is

receiving		caused to receive the particular transmission of said program ...
	Page 28, lines 6 – 10. See Figs. 2 and 7.	In the present invention, the signal processor--26 in Fig. 2; ... 200 in Fig. 7; and elsewhere--is focal means for the controlling and monitoring subscriber station operations.
a portion of	Page 34, line 18 - page 35, line 9 (emphasis added)	Signal decoder apparatus such as decoder, 203, in Fig. 1 and decoders, 30 and 40, in Fig. 2 are basic in the unified system of this invention. Fig. 2A shows a TV signal decoder that detects signal information embedded in an inputted television frequency, ... In Fig. 2A, ... The first path, designated A, detects signal information embedded in the video information *portion* of said television channel signal. Path A inputs to a standard line receiver, 33, well known in the art. Said line receiver, 33, receives the information of one or more of the lines normally used to define a television picture.
	Page 85, lines 23 - 25	In television, the normal transmission location of the preferred embodiment is in the vertical interval of each frame of the television video transmission.
a broadcast or cablecast transmission, said method further comprising the step of	Page 29, lines 4 - 7	Fig. 2 shows one embodiment of a signal processor. Said processor, 26, is configured for simultaneous use with a cablecast input that conveys both television and radio programming and a broadcast television input.
transmitting in said portion at least one of said instruct-to-clear signal	Page 372, lines 22 - 26	... recorder, 76, transmits eight SPAM messages that are embedded in the prerecorded programming of Q. (Hereinafter, said messages are called [in the order in which said messages are transmitted], the "1st commence-outputting message (#9)", ...
	Page 85, lines 23 - 25	In television, the normal transmission

		location of the preferred embodiment is in the vertical interval of each frame of the television video transmission.
and data	Page 369, lines 23 - 31	... causes computer, 73, to generate a particular first outbound SPAM message that includes information of the aforementioned data file, DATA_OF.ITS, whose information constitutes a complete instance of a data module set of Q and to cause said message to be embedded in the transmission of the programming of Q and transmitted to field distribution system, 93, in the following fashion. (Hereinafter, said first outbound SPAM message is called the "data-module-set message (#9).")
	Page 85, lines 23 - 25	In television, the normal transmission location of the preferred embodiment is in the vertical interval of each frame of the television video transmission.
to be	Page 483, lines 2 - 13	At the station of Figs. 7 and 7F, receiving the data-module-set message (#10) transmitted by the intermediate transmission station of Fig. 6 causes said message to be detected at decoder, 203, and causes decoder, 203, to load and execute at microcomputer, 205, the information segment of said message (which includes complete information of the aforementioned data file, DATA_OF.ITS, of said station). Executing said information causes microcomputer, 205, to place said complete information at a so-called "D:" RAM disk at the RAM of said microcomputer, 205, in a file entitled, at the directory of said disk, "DATA_OF.ITS".
stored in a memory to be cleared	Page 501, lines 16 - 25	Automatically, under control of said instructions, microcomputer, 205, clears video RAM; ... selects from said D:DATA_OF.ITS file information of the

		aforementioned southwest delivery route telephone number, "456-1414", and causes binary image information of said number to be placed at bit locations that produce video image information in the lower middle portion of a video screen.
in response to said instruct-to-clear signal.	Page 500, lines 9 - 15	At the station of Figs. 7 and 7F, receiving said 1st cease-outputting message (#10) causes decoder, 203, ... to input the aforementioned clear ... instruction to the CPU of microcomputer, 205. In the preferred embodiment, said instruction is inputted to said CPU as an interrupt signal.
	Page 500, lines 15 - 22	Receiving said clear ... instruction as an interrupt signal causes microcomputer, 205, ... to execute a particular when-interrupted portion of said program instruction set of Q.1.
	Page 501, lines 5 - 7	Then, under control of the instructions of said when-interrupted portion, microcomputer, 205, determines ...
	Page 501, lines 16 - 25	Automatically, under control of said instructions, microcomputer, 205, clears video RAM; ... selects from said D:DATA_OF.ITS file information of the aforementioned southwest delivery route telephone number, "456-1414", and causes binary image information of said number to be placed at bit locations that produce video image information in the lower middle portion of a video screen.

30. (**Amended**) The method of claim 29, wherein a portion of said data is transmitted before	Page 369, lines 23 - 31	... causes computer, 73, to generate a particular first outbound SPAM message that includes information of the aforementioned data file, DATA_OF.ITS, whose information constitutes a complete instance of a data module set of Q and to cause said message to be embedded in the

		transmission of the programming of Q and transmitted to field distribution system, 93, in the following fashion. (Hereinafter, said first outbound SPAM message is called the "data-module-set message (#9).")
said instruct-to clear signal is transmitted.	Page 372, lines 20 - 28	... as recorder, 76, plays and transmits the programming of Q, via modulator, 83, to field distribution system, 93, recorder, 76, transmits eight SPAM messages that are embedded in the prerecorded programming of Q. (Hereinafter, said messages are called ... the "1st commence-outputting message (#9)", ...
	Page 500, lines 9 - 15	At the station of Figs. 7 and 7F, receiving said 1st cease-outputting message (#10) causes decoder, 203, ... to input the aforementioned clear ... instruction to the CPU of microcomputer, 205.

31. **(Twice Amended)** A method of generating	Page 40, lines 17 - 25	The signals of the present invention are the modalities whereby stations that originate programming transmissions control the handling, generating, and displaying of programming at subscriber stations. (The term, "SPAM," is used, hereinafter, to refer to signal processing apparatus and methods of the present invention.) SPAM signals control and coordinate a wide variety of subscriber stations. Said stations include so-called "local
a television display	Page 451, line 3	And the Fig. 1C combining is displayed.
	Page 26, lines 8 - 11	TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
in a receiver station,	Page 450, lines 3 - 5	... the station of Fig. 7 (and

		microcomputers, 205, similarly at each of a large plurality of other subscriber stations) ...
	For example, page 19, lines 6 - 7	Fig. 1 shows a video/computer combined medium subscriber station.
said receiver station including at least one processor	Page 450, lines 2 - 6	... microcomputer, 205, of the station of Fig. 7 (and microcomputers, 205, similarly at each of a large plurality of other subscriber stations) has been updated and contains all relevant stock information.
	For example, page 21, lines 5 - 14	At said subscriber station, microprocessor, 205, contains a conventional 5 1/4" floppy disk at a designated one of its disk drives that holds a data file recorded in a fashion well known in the art. Said file contains information on the portfolio of financial instruments owned by the subscriber that identifies the particular stocks in the portfolio, the number of shares of each stock owned at the close of business of each business day from the end of the previous week, and the closing share prices applicable each day.
for generating a viewer-specific television programming video image	Page 451, line 3	And the Fig. 1C combining is displayed.
	Page 26, lines 4 - 11	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.

and a monitor for displaying said viewer-specific television programming video image, said method comprising the steps of:	Page 392, lines 8 - 10	apparatus of TV set, 202 ... the TV monitor, 202M, apparatus of said set, 202, in Fig. 7 ...
	Page 451, line 3	And the Fig. 1C combining is displayed.
	Page 26, lines 8 - 11	TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
receiving,	Page 450, lines 22 - 25	... receive information of said transmission, ... said "Wall Street Week" program ...
	For example, page 20, lines 21 - 26	In the example, the subscriber station of Fig. 1 is in New York City and is tuned to the conventional broadcast television transmission frequency of channel 13 at 8:30 PM on a Friday evening when the broadcast station of said frequency, WNET, commences transmitting a television program about stock market investing, "Wall Street Week."
	Page 448, lines 25 - 27	Microcomputer, 205, ... receives information that is transmitted by means of telephone or data communications network, 262; ...
from remote sources,	Page 450, lines 10 - 12	... the program originating studio that originates transmission of the "Wall Street Week" program ...
	Page 448, lines 33 - 34	... a computer at said broker's office station ...
(i) a broadcast or cablecast transmission including transmitted	Page 324, lines 11 - 21	The stations so automated may transmit any form of electronically transmitted programming, including television, radio,

television programming		print, data, and combined medium programming and may range in scale of operation from wireless broadcast stations that transmit a single programming transmission to cable systems that cablecast many channels simultaneously. Fig. 6 illustrates Signal Processing Apparatus and Methods at an intermediate transmission station that is a cable television system "head end" and that cablecasts several channels of television programming.
	For example, page 429, lines 26 - 30	The program originating studio that originates the "Wall Street Week" program originates, embeds, and transmits the programming ... and the intermediate transmission station of Fig. 6 receives and retransmits said programming, ...
	For example, page 20, lines 21 - 26	In the example, the subscriber station of Fig. 1 is in New York City and is tuned to the conventional broadcast television transmission frequency of channel 13 at 8:30 PM on a Friday evening when the broadcast station of said frequency, WNET, commences transmitting a television program about stock market investing, "Wall Street Week."
and (ii) a viewer-specific information transmission;	Page 448, lines 30 - 34	Each time the stockbroker who represents the subscriber of the station of microcomputer, 205, executes a transaction (that is, buys or sells stocks) for said subscriber's account, a computer at said broker's office station telephones microcomputer, 205; ...
passing said detected viewer-specific information transmission	Page 448, line 34 - page 449, line 3	... telephones microcomputer, 205; inputs data of the transaction (which data includes, for example, the identity of the company whose shares were traded, the number of shares bought or sold, and whether the transaction was a buy or a sale); ...

and at least a portion of said transmitted television programming to said processor;	Page 450, lines 16 - 26	In so doing, said studio causes a plurality of intermediate transmission stations that are preprogrammed and function in the fashion of the station of Fig. 6 and a plurality of subscriber stations that are preprogrammed and function in the fashion of the station of Fig. 7 (and 7C) to cause apparatus at each of said subscriber stations to interconnect, receive information of said transmission, decrypt said information, and prepare to display (or otherwise output) information of said "Wall Street Week" program in the fashions of example #7 and of the above description called "MORE ON EXAMPLE #7".
	For example, page 19, lines 6 - 28	Fig. 1 shows a video/computer combined medium subscriber station. Via conventional antenna, the station receives a conventional television broadcast transmission at television tuner, 215. The Model CV510 Electronic TV Tuner of the Zenith Radio Corporation of Chicago, Illinois, which is a component of the Zenith Video Hi-Tech Component TV system, is one such tuner. This tuner outputs conventional audio and composite video transmissions. The audio transmission is inputted to TV monitor, 202M. The video transmission is inputted to video transmission divider, 4, which is a conventional divider that splits the transmission into two paths. One is inputted continuously to TV signal decoder, 203, and the other to microcomputer, 205. TV signal decoder, 203, which is described more fully below, has capacity for receiving a composite video transmission; detecting digital information embedded therein; correcting errors in the received information by means of forward error checking techniques, well known in the art; converting the received information, as may be required, by means of input

		protocol techniques, well known in the art, into digital signals that microcomputer, 205, can receive and process and that can control the operation of microcomputer, 205; and transferring said signals to microcomputer, 205.
storing said passed viewer-specific information transmission;	Page 449, lines 3 - 9	... and causes microcomputer, 205, to updates its stock portfolio records in a predetermined fashion (for example, by adding to said records data of shares bought and removing data of shares sold). In so doing, said office station computer causes causes an up-to-date record of the identity of the stocks and number of shares in the subscriber portfolio automatically to exist at microcomputer, 205.
causing said processor, in response to an instruct-to-clear signal, to clear a memory;	Page 451, lines 1 - 3	Then the combined medium combining process described above in "One Combined Medium" and in examples #1, #2, #3, #4, etc. commences. And the Fig. 1C combining is displayed.
	Page 21, line 35 - page 23, line 12. "One Combined Medium" extends from page 19 to page 28.	At said program originating studio, at the outset of said program transmission, a first series of control instructions is generated, embedded sequentially on said line or lines of the vertical interval, and transmitted on the first and each successive frame of said television program transmission, signal unit by signal unit and word by word, until said series has been transmitted in full. The instructions of said series are addressed to and control the microcomputer, 205, of each subscriber station. In said series in full--and in any one or more subsequent series of instructions--particular instructions are separated, as may be required, by time periods when no instruction that controls the microcomputer, 205, of any station is transmitted which periods allow sufficient time for the microcomputer, 205, of each

		and every subscriber station to complete functions controlled by previously transmitted instructions and commence waiting for a subsequent instruction, in a waiting fashion well known in the art, before receiving a subsequent instruction. Tuner, 215, receives this television transmission, converts the received television information into audio and composite video transmissions, and transmits the audio to monitor, 202M, and the video via divider, 4, to microcomputer, 205, and decoder, 203. Decoder, 203, detects the embedded instruction information, corrects it as required, converts it into digital signals usable by microcomputer, 205, and transmits said signals to microcomputer, 205. With each step occurring in a predetermined fashion or fashions, well known in the art, this first set of instructions commands microcomputer, 205, (and all other subscriber station microcomputers simultaneously) to interrupt the operation of its central processor unit (hereinafter, "CPU") and any designated other processors; then to record the contents of the registers of its CPU and any other designated processors either at a designated place in random access memory (hereinafter, "RAM") or on the contained disk; then to set its PC-MicroKey 1300 to the "GRAPHICS OFF" operating mode in which mode it transmits all received composite video information to monitor, 202M, without modification; then to record all information in RAM with all register information in an appropriately named file such as "INTERUPT.BAK" at a designated place on the contained disk; then to clear all RAM (except for that portion of RAM containing the so-called "operating system" of said microcomputer, 205) and all registers of said CPU and any

		other designated processors; then to wait for further instructions from decoder, 203.
generating a viewer-specific television video image for storage at said memory; and	Page 24, line 22 - page 25, line 14	Under control of said program instruction set and accessing the subscriber's contained portfolio data file for information in a fashion well known in the art, microcomputer, 205, calculates the performance of the subscriber's stock portfolio and constructs a graphic image of that performance at the installed graphics card. The instructions cause the computer, first, to determine the aggregate value of the portfolio at each day's close of business by accumulating, for each day, the sum of the products of the number of shares of each stock held times that stock's closing price. The instructions then cause microcomputer, 205, to calculate the percentage change in the portfolio's aggregate value for each business day of the week in respect to the final business day of the prior week. Then in a fashion well known in the art, the instructions cause microcomputer, 205, to enter digital bit information at the video RAM of the graphics card in a particular pattern that depicts the said percentage change as it would be graphed on a particular graph with a particular origin and set of scaled graph axes. Upon completion of these steps, the instructions cause microcomputer, 205, to commence waiting for a subsequent instruction from decoder, 203. If the information at video RAM at the end of these steps were to be transmitted alone to the video screen of a TV monitor, it would appear as a line of a designated color, such as red, on a background color that is transparent when overlaid on a separate video image. Black is such a background color, and Fig. 1A shows one such line.
	Page 26, lines 8 - 10	TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the

		subscriber's own portfolio performance overlaid on the ...
combining said viewer-specific television video image and said transmitted television programming to generate said viewer-specific television programming video image.	Page 26, lines 4 - 11	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.

32. (**Amended**) The method of claim 31, wherein said memory comprises video RAM.	Page 22, line 34 - page 23, line 12	then to record the contents of the registers of its CPU and any other designated processors either at a designated place in random access memory (hereinafter, "RAM") or on the contained disk; then to set its PC-MicroKey 1300 to the "GRAPHICS OFF" operating mode in which mode it transmits all received composite video information to monitor, 202M, without modification; then to record all information in RAM with all register information in an appropriately named file such as "INTERUPT.BAK" at a designated place on the contained disk; then to clear all RAM (except for that portion of RAM containing the so-called "operating system" of said microcomputer, 205) and all registers of said CPU and any other designated processors; then to wait for further instructions from decoder, 203.
	Page 24, line 35 - page 25, line 6	Then in a fashion well known in the art, the instructions cause microcomputer, 205, to enter digital bit information at the video RAM of the graphics card in a particular pattern that depicts the said percentage change as it would be graphed on a particular graph with a particular origin and set of scaled graph axes.

33. (**Amended**) The method of claim 31, further comprising the step of detecting said instruct-to-clear signal in said broadcast or cablecast transmission.	Page 21, line 35 - page 23, line 12	At said program originating studio, at the outset of said program transmission, a first series of control instructions is generated, embedded sequentially on said line or lines of the vertical interval, and transmitted on the first and each successive frame of said television program transmission, signal unit by signal unit and word by word, until said series has been transmitted in full. The instructions of said series are addressed to and control the microcomputer, 205, of each subscriber station. In said series in full--and in any one or more subsequent series of instructions--particular instructions are separated, as may be required, by time periods when no instruction that controls the microcomputer, 205, of any station is transmitted which periods allow sufficient time for the microcomputer, 205, of each and every subscriber station to complete functions controlled by previously transmitted instructions and commence waiting for a subsequent instruction, in a waiting fashion well known in the art, before receiving a subsequent instruction. Tuner, 215, receives this television transmission, converts the received television information into audio and composite video transmissions, and transmits the audio to monitor, 202M, and the video via divider, 4, to microcomputer, 205, and decoder, 203. Decoder, 203, detects the embedded instruction information, corrects it as required, converts it into digital signals usable by microcomputer, 205, and transmits said signals to microcomputer, 205. With each step occurring in a predetermined fashion or fashions, well known in the art, this first set of

		instructions commands microcomputer, 205, (and all other subscriber station microcomputers simultaneously) to interrupt the operation of its central processor unit (hereinafter, "CPU") and any designated other processors; then to record the contents of the registers of its CPU and any other designated processors either at a designated place in random access memory (hereinafter, "RAM") or on the contained disk; then to set its PC-MicroKey 1300 to the "GRAPHICS OFF" operating mode in which mode it transmits all received composite video information to monitor, 202M, without modification; then to record all information in RAM with all register information in an appropriately named file such as "INTERUPT.BAK" at a designated place on the contained disk; then to clear all RAM (except for that portion of RAM containing the so-called "operating system" of said microcomputer, 205) and all registers of said CPU and any other designated processors; then to wait for further instructions from decoder, 203.

34. (**Amended**) The method of claim 31, wherein said steps of detecting and clearing occur before	Page 21, line 35 - page 23, line 12	At said program originating studio, at the outset of said program transmission, a first series of control instructions is generated, embedded sequentially on said line or lines of the vertical interval, and transmitted on the first and each successive frame of said television program transmission, signal unit by signal unit and word by word, until said series has been transmitted in full. The instructions of said series are addressed to and control the microcomputer, 205, of each subscriber station. In said series in full--and in any one or more subsequent series of instructions--particular instructions are separated, as may be required, by time periods when no

		instruction that controls the microcomputer, 205, of any station is transmitted which periods allow sufficient time for the microcomputer, 205, of each and every subscriber station to complete functions controlled by previously transmitted instructions and commence waiting for a subsequent instruction, in a waiting fashion well known in the art, before receiving a subsequent instruction. Tuner, 215, receives this television transmission, converts the received television information into audio and composite video transmissions, and transmits the audio to monitor, 202M, and the video via divider, 4, to microcomputer, 205, and decoder, 203. Decoder, 203, detects the embedded instruction information, corrects it as required, converts it into digital signals usable by microcomputer, 205, and transmits said signals to microcomputer, 205. With each step occurring in a predetermined fashion or fashions, well known in the art, this first set of instructions commands microcomputer, 205, (and all other subscriber station microcomputers simultaneously) to interrupt the operation of its central processor unit (hereinafter, "CPU") and any designated other processors; then to record the contents of the registers of its CPU and any other designated processors either at a designated place in random access memory (hereinafter, "RAM") or on the contained disk; then to set its PC-MicroKey 1300 to the "GRAPHICS OFF" operating mode in which mode it transmits all received composite video information to monitor, 202M, without modification; then to record all information in RAM with all register information in an appropriately named file such as "INTERUPT.BAK" at a designated place on the contained disk;

		then to clear all RAM (except for that portion of RAM containing the so-called "operating system" of said microcomputer, 205) and all registers of said CPU and any other designated processors; then to wait for further instructions from decoder, 203.
said step of combining.	Page 26, lines 4 - 11	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.

35. (**Twice Amended**) The method of claim 34, wherein said broadcast or cablecast transmission includes at least one embedded signal and said generating step occurs in response to said at least one embedded signal.	Page 23, line 35 - page 25, line 14	Subsequently, a second series of instructions is embedded and transmitted at said program originating studio. Said second series is detected and converted into usable digital signals by decoder, 203, and inputted to microcomputer, 205, in the same fashion as the first series. Microcomputer, 205, evaluates the initial signal word or words which instruct it to load at RAM (from the input buffer to which decoder, 203, inputs) and run the information of a particular set of instructions that follows said word or words just as the information of a file named FILE.EXE, recorded on the contained floppy disk, would be loaded at RAM (from the input buffer to which the disk drive of said disk inputs) and run were the command "FILE" entered from the console keyboard to the system level of the installed disk operating system. (Hereinafter, such a set of instructions that is loaded and run is called a "program instruction set.") In a fashion well known in the art, microcomputer, 205, loads the

		received binary information of said set at a designated place in RAM until, in a predetermined fashion, it detects the end of said set, and it executes said set as an assembled, machine language program in a fashion well known in the art. Under control of said program instruction set and accessing the subscriber's contained portfolio data file for information in a fashion well known in the art, microcomputer, 205, calculates the performance of the subscriber's stock portfolio and constructs a graphic image of that performance at the installed graphics card. The instructions cause the computer, first, to determine the aggregate value of the portfolio at each day's close of business by accumulating, for each day, the sum of the products of the number of shares of each stock held times that stock's closing price. The instructions then cause microcomputer, 205, to calculate the percentage change in the portfolio's aggregate value for each business day of the week in respect to the final business day of the prior week. Then in a fashion well known in the art, the instructions cause microcomputer, 205, to enter digital bit information at the video RAM of the graphics card in a particular pattern that depicts the said percentage change as it would be graphed on a particular graph with a particular origin and set of scaled graph axes. Upon completion of these steps, the instructions cause microcomputer, 205, to commence waiting for a subsequent instruction from decoder, 203. If the information at video RAM at the end of these steps were to be transmitted alone to the video screen of a TV monitor, it would appear as a line of a designated color, such as red, on a background color that is transparent when overlaid on a separate video image. Black is such a background color, and Fig. 1A

		shows one such line.

36. (**New**) The method of claim 24, wherein said instruct-to-clear signal causes said at least one of said plurality of receiver stations to process an interrupt signal.	Page 500, lines 9 - 15	At the station of Figs. 7 and 7F, receiving said 1st cease-outputting message (#10) causes decoder, 203, ... to input the aforementioned clear ... instruction to the CPU of microcomputer, 205. In the preferred embodiment, said instruction is inputted to said CPU as an interrupt signal.